EFFICIENT MULTI-SLICE ACQUISITION WITH BLACK BLOOD CONTRAST IN FAST SPIN ECHO IMAGING

Abstract of Disclosure

The invention includes a technique for efficient multi-slice fast spin echo image acquisition with black blood contrast in cardiac imaging. The technique includes applying a non-selective inversion pulse, followed by a re-inversion pulse that is slice-selective over a region encompassing a plurality of slice selections. Execution of a series of RF excitation pulses with fast spin echo readout is timed such that signal from blood is near a null point before acquiring data for each spatial slice. For greater contrast consistency, the flip angles for the excitation pulses occurring before the null point can be reduced, and those occurring after the null point can be increased.